



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/492,913	01/20/2000	Anthony M Eaton	899.011US1	1549

21186 7590 10/26/2005

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH
1600 TCF TOWER
121 SOUTH EIGHT STREET
MINNEAPOLIS, MN 55402

EXAMINER

LAO, LUN S

ART UNIT	PAPER NUMBER
----------	--------------

2644

DATE MAILED: 10/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/492,913

Applicant(s)

EATON ET AL.

Examiner

Lun-See Lao

Art Unit

2644

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5,15-72 and 93-95 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5,15-72 and 93-95 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>08-26-2005</u> . | 6) <input type="checkbox"/> Other: _____ |

By

DETAILED ACTION

Introduction

1. The request filed on 08-25-2005 for a Continued Prosecution Application (CPA) under 37 CFR 1.53(d) based on parent Application No. 09/492,913 is acceptable and a CPA has been established. An action on the CPA follows.
2. This action is in response to the amended filed on 08-25-2005. Claims 1,3, 4,15-16, 28-29, 47-48, 66, 70 and 95 have been amended, and claims 6-14 and 73-92 have been withdrawn. Claims 1-5, 15-72 and claims 93-95 are pending.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-5, 66, and 68-69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hagen et al. (US PAT 6,424,722) in view of Knappe (US PAT 6,061,431).

Consider claims 1 Hagen teaches that a mobile wireless communication protocol (see fig.9, (236, 320) to communicate between a mobile device (320) and a programming hearing aid (see col.9 line 1-col. 15 line 37); and programming software in a hearing aid (see fig. 9, (344,348)) using the programming fitting server (236 such as

Art Unit: 2644

center computer and see col.2, line 22-42) and a the mobile device (320 and se col. 14 line 1-col. 15 line 37); but Hagen does not clearly teaches that a mobile wireless communication protocol to communicate between a mobile device and a programming fitting server.

However, Knappe teaches that a mobile wireless communication protocol (such as a cellular telephone and see col. 5 line 7-35) to communicate between a mobile device (cellular telephone) and a programming fitting server (see fig.1 and col. 2 line 19-col. 3 line 67).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Knappe into Hagen to a wireless communication between a mobile device and a programming fitting computer so that more convenience can be provided to the user.

Consider claims 2-3, Hagen teaches a programming software in a hearing aid includes upgrading software in the hearing aid (see figs. 9-10 and col. 14 line 1-col. 15 line 37); and the programming software in a hearing aid includes sending a distributed application from the server (see fig.9, (236 such as center computer and see col.2, line 22-42)) to the mobile device (320), the distributed application being adapted to interact with the hearing aid (see col. 14 line 1-col. 15 line 37).

Consider claim 4, Hagen teaches that a programming a hearing aid system through a mobile device using at least one mobile wireless communication protocol, wherein programming the hearing aid system includes (see figs 9-10 and col. 14 line 1 –col. 15 line 15):

Art Unit: 2644

receiving a distributed application in the mobile device (see fig.9 320) from a programming fitting server (see fig.9,(236 such as center computer and see col.2, line 22-42)) through at least one mobile wireless communication protocol (320); and using the distributed application to program a hearing aid in the hearing aid system (see col. 14 line 1-col. 15 line 37). But, Hagen does not clearly teaches that receiving a distributed application in the mobile device from a programming fitting server through at least one long-range network using the at least one mobile wireless communication protocol.

However, Knappe teaches that that receiving a distributed application in the mobile device (such as cellular telephone) from a programming fitting server (se fig.1, 24) through at least one long-range network using the at least one mobile wireless (such as, a cellular telephone and see col. 5 line 7-35) communication protocol (see fig.1 and col. 2 line 19-col. 3 line 67).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Knappe into Hagen to a wireless communication between a mobile device and a programming fitting computer so that more convenience can be provided to the user.

Consider claim 66, Hagen teaches that a hearing aid system having a hearing aid (see fig.9); a programming fitting server (236 such as center computer and see col.2, line 22-42) adapted to store a distributed application; and a terminal (320) adapted to program the hearing aid (344,348), the terminal (320) adapted to communicate using a wire communication protocol to receive the distributed application from the server

Art Unit: 2644

(236 such as center computer and see col.2, line 22-42), the mobile device (320) adapted to use the distributed application to interact with the hearing aid (344,348); but Hagen does not clearly teach that communication using a wireless communication protocol to receive the distributed application from the server from a long-range network.

However, Knappe teaches that that communication using a wireless communication protocol (such as, a cellular telephone and see col. 5 line 7-35) to receive the distributed application from the server from a long-range network (see fig.1 and col. 2 line 19-col. 3 line 67).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Knappe into Hagen to a wireless communication between a mobile device and a programming fitting computer so that more convenience can be provided to the user.

Consider claims 68 and 69 , Knappe teaches that the terminal is adapted to communicate using a wireless access protocol (such as cellular telephone and see col.5 lines 7-17); and the system of the distributed application includes an object (such as for matching telephone number) that is adapted to receive information from the server and adapted to transmit information to the server (see col.2 line 19-col.3 line 33).

5. Claims 15-21, 24-26, 30,32-33, 36, 47- 53,56-58, 64-65 and 94 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hagen et al. (US PAT 6,424,722) in view of Anderson (US PAT 5,721,783).

Art Unit: 2644

Consider claim 15, Hagen teaches that a hearing aid system having a hearing aid (see fig.9, (344,348));

a programming fitting server (236 such as center computer and see col.2, line 22-42);

a mobile device (320) adapted to use a mobile communication protocol (320) to communicate with the programming fitting server (236 such as center computer and see col.2, line 22-42) and to program the software in the hearing aid (344,348 and see col. 14, line 1-col. 15 line 33); but Hagen does not clearly teach to use a mobile wireless communication protocol to communicate with the programming fitting server

However, Anderson teaches to use a mobile wireless communication protocol (see fig.2 and col.5 line 60-col. 6 line 46) and to communicate with a wireless networking or local networking (see col.25 line 15-col. 26 line 53), but Anderson does not clearly teach the programming fitting server. On the other hand, Anderson does indicated that area networking and wireless network and it is well known to have a fitting server for a networking (official notice is taken) and therefore it would have been obvious that Anderson could have a programming fitting server to provide a new and useful auditory aid for hearing impaired persons (see col.25 line 15-col. 26 line 53).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Anderson into Hagen to a wireless communication between a mobile device and a programming fitting computer so that more convenience can be provided to the user.

Art Unit: 2644

Consider claim 16, Hagen teaches that the server (see fig.9, 236 such as center computer and see col.2, line 22-42) is adapted to transmit a distributed application to the mobile device (320) the distributed application being adapted to interact with the hearing aid (344,348 and see col. 14 line 1-col. 15 line 33).

Consider claims 16-17 and 48-49, Anderson teaches that the system of further comprising (because by local area networking) a server adapted to communicate with the mobile device (see fig.1, 13 in associated with 16 to provide a mobile device and col.27 lines 4-24)(see col.26 lines 6-53); and the system of further comprising at least one network to facilitate communications at least among the hearing aid system, the mobile device (see fig.1, 13 in associate with 16 to provide a mobile device and col.27 lines 4-24), and the server (see col.26 lines 6-53 and see the discussion in claim 15)

Consider claims 18-19 and 50-51, Hagen teaches that the system of the hearing aid system (see fig.9) includes a hearing aid programming system (see fig.9 and col.14 line 1-col.15 line 33); and the system of the hearing aid system (see fig.9) is capable of audio signal processing system (see figs.9-10 and col.14 line 1-col.15 line 33).

Consider claim 20 and 52 Bagen teaches that the system of the hearing aid system (see fig.9) includes a programming module adapted to communicate with the hearing aid, and wherein the programming module is adapted to communicate with the mobile device (320) so as to receive at least one programming instruction from the mobile device (320) to program the hearing aid (see fig.9, 344, 348 and col.14 line 1-col.15 line 33).

Art Unit: 2644

Consider claim 21 Anderson teaches the system of the programming module includes a headset (see fig.2, 28).

Consider claim 24, Anderson teaches that the system of the mobile device includes a mobile device selected from a group consisting of a digital cellular telephone, a personal digital assistant, and a personal communication and information device (see fig.2).

Consider claims 25-26 and 57-58 Hagen teaches that the system of the mobile device (see fig.9, 320) is adapted to inherently synchronize data with the server (see fig.9, 236 such as center computer and see col.2, line 22-42 and col. 14 line 1-col. 15 line 33); and the mobile device (see fig.9 320) receive an upgraded audiological software from the server (see fig.9, 236 such as, center computer and see col.2, line 22-42 and col. 14 line 1-col. 15 line 33).

Consider claim 30 Anderson teaches the system of the mobile device is configured to communicate with the hearing system over a short-range network (see fig.2 and col.5 line 61-col.6 line 25).

Consider claims 32-33, and 64-65, Anderson teaches that the system of the optical (infrared) communication network (see fig.1) includes an optical communication network using Infrared Data Association (IrDA) protocol (see col.22 line 63-col.23 line 35); and the system of the hearing aid system is adapted to communicate with the mobile device wirelessly through the short-range network (see fig.2 (between 23 and 22)).

Consider claim 36 Hagen teaches a system comprising:
a hearing aid system having a hearing aid (see fig.9 (344,348));

Art Unit: 2644

a distributed application (236); and

a mobile device adapted (320) to program the hearing aid, the mobile device adapted to use a mobile wire communication protocol to receive the distributed application from a computer from a long-range network (see fig.9, 236 such as center computer and see col.2, line 22-42), the mobile device (320) adapted to use the distributed application to program the hearing aid (see fig.9, 334,348 and col. 14 line 1-col. 15 line 33), but Hagen does not clearly teach a mobile device adapted to use a mobile wireless communication protocol to receive the distributed application from a computer from a long-range network.

However, Anderson teaches a mobile device(see fig.1, 13 in associated with 16 to provide a mobile device and col.27 lines 4-24) adapted to use a mobile wireless communication protocol to receive the distributed application from a computer from a long-range network (see col. 25 line 15-col. 26 line 53).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Anderson into Hagen to a wireless communication between a mobile device and a networking computer so that more convenience can be provided to the user.

Consider claims 47-48, Hagen teaches a system comprising:

a hearing aid system having a hearing aid (see fig. 9, (344,348)); and

a terminal (320) adapted to program software in the hearing aid, the terminal adapted to use at least one wire communication protocol to communicate with a programming fitting server (236 such as center computer and see col.2, line 22-42)

Art Unit: 2644

to program the software (see col. 14 line 1-col. 15 line 33); but Hagen does not clearly teach that the terminal adapted to use at least one wireless communication protocol to communicate with a programming fitting server to program the software.

However, Anderson teaches that the terminal adapted to use at least one wireless communication protocol to communicate with a network computer to program the software (see fig.2 and col. 25 line 15-col. 26 line 53); but Anderson does not clearly teach the programming fitting server. On the other hand, Anderson does indicated that area networking and wireless network and it is well known to have a fitting server for a networking (official notice is taken) and therefore it would have been obvious that Anderson could have a programming fitting server to provide a new and useful auditory aid for hearing impaired persons (see col.25 line 15-col. 26 line 53).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Anderson into Hagen to a wireless communication between a mobile device and a programming fitting computer so that more convenience can be provided to the user.

Consider claim 53, Anderson teaches that the system of the programming module includes a headset (see fig.2) that is capable of communicating ambient information (see col. 26 line 6-col.27 line 24).

Consider claim 56, Anderson teaches the system of the terminal is a data terminal (see figs.2and 5a-5b and col.11 line 19-col.12 line 46)

Art Unit: 2644

Consider claim 94, Anderson teaches the system of the mobile device is adapted to communicate using a Wireless Access Protocol (such as cellular telephone and see col.5 line 22-col.6 line 25).

6. Claim 22-23 and 54-55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hagen et al. (US PAT 6,424,722) as modified by Anderson (US PAT 5,721,783) as claims 15 and 47 above, and further in view of Shennib (US PAT 5,197,332).

Consider claims 22, 54 Hagen and Anderson do not teach the hearing aid is capable of digital audio compression and decompression, and wherein the programming module is capable of digital audio compression and decompression.

However, Shennib teaches the hearing aid is capable of digital audio compression and decompression, and wherein the programming module is capable of digital audio compression and decompression (see col.6 line 62-col.8 line 25).

Therefore, it would have obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Shennib into the teaching of Hagen and Anderson to provide a unitary system for both testing of hearing and programming a programmable hearing aid. The system incorporates all of the necessary electronics and transducer components into a headset instrument to be worn by a patient.

Consider claims 23, 55 Shennib teaches the system of the programming module is capable of sending a test audio signal to the hearing aid so as to test at least one aural response of a patient (see col.7 line 22-col.8 line 29).

7. Claims 27-29, 31-32 and 34-35 and 59-63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hagen et al. (US PAT 6,424,722) as modified by Anderson (US PAT 5,721,783) as claims 15 and 47 above, and further in view of Leppisaari et al. (US PAT 6,717,925).

Consider claims 27 and 59, Hagen and Anderson do not teach that the system of the mobile device is adapted to use a data service protocol selected from a group consisting of General Packet Radio Service (GPRS), High-Speed Circuit-Switched Data Service (HSCSD), Enhanced Data Rate for GSM Evolution (EDGE), Integrated Services Digital Network (ISDN), Universal Mobile Telecommunications System (UMTS), and Cellular Digital Packet Data (CDPD).

However, Leppisaari teaches that the system of the mobile device is adapted to use a data service protocol selected from a group consisting of General Packet Radio Service (GPRS), High-Speed Circuit-Switched Data Service (HSCSD), Enhanced Data Rate for GSM Evolution (EDGE), Integrated Services Digital Network (ISDN), Universal Mobile Telecommunications System (UMTS), and Cellular Digital Packet Data (CDPD) (see col.5 lines 24-63).

Therefore, it would have obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Leppisaari into the teaching of Hagen and Anderson to provide a method of operating a mobile communication system supporting radio data transmission between a mobile station and a network in a number of different packet data protocols including a point to multipoint-multicast protocol,

Art Unit: 2644

where the protocol is identified by a protocol identifier transmitted between the network and the mobile station.

Consider claims 28-29 and 31 and 60-63 Leppisaari teaches that the standard mobile wireless communication protocol includes a wireless communication protocol to operate on a long-range wireless network (see fig.2, (between MS and BSS); and the system of the wireless communication protocol to operate on a long-range wireless network (see fig.2, (between MS and BSS)) includes a protocol selected from a group consisting of Global System for Mobile Communications (GSM), Code Division Multiple Access-One (cdmaOne), Time Division Multiple Access (TDMA), PDC, JDC, Universal Mobile Telecommunications System (UMTS), Code Division Multiple Access-2000 (cdma2000), and Digital Enhanced Cordless Telephony (DECT) (see col.5 lines 24-63); and the system of the at least one network includes a short range network (see fig.2 (between MS and PC/PDA)); and the system of the short-range (see fig.2 (between MS and PC/PDA)) network includes a short range network selected from a group consisting of a radio communication network, an optical communication network, and a wired communication network (see col.5 lines 24-63).

Consider claim 32, Anderson teaches that the system of the optical (infrared) communication network (see fig.1) includes an optical communication network using Infrared Data Association (IrDA) protocol (see col.22 line 63-col.23 line 35).

Consider claims 34, Leppisaari teaches the system of further comprising an the server is adapted to couple to an Internet (see fig.2).

Art Unit: 2644

Consider claim 35, Hagen teaches that the system, further comprising a gateway inherently (because such as a computer includes with a network card or router switch) adapted to coupled in a communication path between the mobile device (see fig.9, 320) and the server (236 such as center computer and see col.2, line 22-42 and see col. 14 line 1-col. 15 line 33).

8. Claims 37-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hagen et al. (US PAT 6,424,722) as modified by Anderson (US PAT 5,721,783) as claim 36 above, and further in view of Szymansky (US PAT 6,557,029).

Consider claim 37, Hagen and Anderson teaches a hearing system, but Brennan and Anderson fail to teach the system of the distributed application includes an applet

However, Browning teaches the system of the distributed application includes an applet (see col.4 lines 1-39).

Therefore, it would have obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Szymansky into the teaching of Hagen and Anderson to provide several different software processes simultaneously.

Consider claims 38-40 Szymansky teaches the system of the applet is configured as a java applet (see col.4 line 1-39); and the system of the applet is adapted to receive information from the computer, and wherein the applet is adapted to transmit information to the computer (see figs. 1-2 and col.4 lines 1-39); and the system of the mobile device includes a browser that is adapted to receive the applet to execute on the mobile device so as to interact with the system (see figs. 1-2 and col.4 lines 1-39).

9. Claims 41 and 71 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hagen et al. (US PAT 6,424,722) as modified by Anderson (US PAT 5,721,783) as claims 15-16 and 47-48 above, and further in view of Knappe (US PAT 6,6061,431).

Consider claims 41 and 71, Hagen and Anderson do not clearly teach that the system of the server includes a database that includes patient data, and audiological data associated with at least one hearing aid system.

However, Knappe teaches that the system of the server includes a database that includes patient data, and audiological data associated with at least one hearing aid system (see col.2 line 19-col.3 line10).

Therefore, it would have obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Knappe into the teaching of Hagen and Anderson to provide hearing compensation parameters stored in a searchable attribute database associated with a user's telephone number.

Consider claims 69-71, Knappe teaches that the system of the at least one object (such as for matching telephone number) is adapted to receive information from the server, and wherein the at least one object is adapted to transmit information to the server (see col.2 line 19-col.2 line 33); and the system of the terminal includes a software environment that is adapted to receive the at least one object (such as for matching telephone number) to execute on the terminal so as to interact with the hearing aid system (see col.1 line 36-col.2 line 5); and the system of the server includes

Art Unit: 2644

a database that includes patient data (user's profile), and audiological data associated with at least one hearing aid system (see col.2 line 12-col.3 line 35).

10. Claim 43-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hagen et al. (US PAT 6,424,722) as modified by Anderson (US PAT 5,721,783) as claim 15 and 24 above, and further in view of Fazio (US PAT 6,590,986).

Consider claim 43, Hagen and Anderson do not teaches the system of the personal communication and information device includes a CompactFlash module that is adapted to communicate with the hearing aid system.

However, Fazio teaches that the system of the personal communication and information device includes a CompactFlash module that is adapted to communicate with the hearing aid system (see abstract and fig.2).

Therefore, it would have obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Fazio into the teaching of Hagen and Anderson to provide a hearing aid programming interface that be lawfully used with computers of all types.

Consider claim 44 Anderson teaches the system of the digital cellular phone includes a custom interface module that is adapted to communicate with the hearing aid system (see col.26 line 6-col.27line 24).

Consider claims 45-46 Fazio teaches the system of the upgraded audiological software includes a piece of software to be executed on the mobile device (see figs. 1-2 and col.3 line 19-col.4 line30); and the system of the hearing aid system includes a

Art Unit: 2644

hearing aid, and wherein the upgraded audiological software includes a piece of software to be executed on the hearing aid (see figs. 1-2 and col.3 line 19-col.4 line 30).

11. Claims 42 and 72 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hagen et al. (US PAT 6,424,722) and Anderson (US PAT 5,721,783) as modified by Leppisaari et al. (US PAT 6,717,925) as applied to claims 15 and 31 above, and further in view of Peters (US PAT 6,601,093).

Consider claims 42 and 72 Hagen; Anderson and Leppisaari do not teach that the system of the radio communication network includes a network selected from a group consisting of HomeRF, DECT, PHS, WLA, and Bluetooth technology.

However, Peters teaches that the system of the radio communication network includes a network selected from a group consisting of HomeRF, DECT, PHS, WLA, and Bluetooth technology (see col.2 line 59-col.3 line 11).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Peters in to teaching of Hagen; Anderson and Lappisaari to provide provide a communication system which is a low-powered radio module.

12. Claims 67 and 70 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hagen (US PAT.6,424,722) as modified by Knappe (US PAT 6,6061,431) as applied to claim 66 above, and further in view of Peter (US PAT 6,601,093).

Art Unit: 2644

Consider claims 67 and 70, Hagen teaches that the system of the terminal is configured to communicate with the hearing aid system using wireless and the terminal (such as computer) is configured to communicate with the hearing aid system over wireless or wire (see fig.1 and col.14 line 1-col.15 line 37), but Brennan and Knappe do not clearly teach that Bluetooth wireless communication protocol; and a short-range network using a protocol associated with the short-range network.

However, Peters teaches the Bluetooth wireless communication protocol and a short-range network using a protocol associated with the short-range network (see fig.1 and col.5 line 1-col.6 line 67).

Therefore, it would have obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Peters in to teaching of Hagen; and Knappe to provide a communication system which is a low-powered radio module for saving energy.

13. Claims 93 and 95 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hagen et al. (US PAT 6,424,722) as modified by Anderson (US PAT 5,721,783) as claim 36 above, and further in view of Peters (US PAT 6,601,093).

Consider claims 93 and 95, Anderson teach that the system of the mobile device is configured to communicate with the hearing aid system using wireless communication protocol and the system of the mobile device is configured to communicate with the hearing aid system over the short-range network (see fig.2, col.4 line26-col.5 line 60); but Brennan and Anderson does not clearly teach that the Bluetooth wireless

Art Unit: 2644

communication protocol and a short-range network using a protocol associated with the short-range network.

However, Peters teaches the Bluetooth wireless communication protocol and a short-range network using a protocol associated with the short-range network (see fig.1 and col.5 line 1-col.6 line 67).

Therefore, it would have obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Peters in to teaching of Hagen; and Anderson to provide a communication system which is a low-powered radio module.

Response to Arguments

14. Applicant's arguments with respect to claims 1-5 and 15-72 and 93-95 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

15. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure. Weinfurter (US PAT 6,035,050); Boesen (US PAT. 6,094,492) and Davis (US PAT. 6,201,875) are recited to show other related hearing aid system.

16. Any response to this action should be mailed to:

Mail Stop ____ (explanation, e.g., Amendment or After-final, etc.)

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Facsimile responses should be faxed to:
(703) 872-9306

Hand-delivered responses should be brought to:
Customer Service Window
Randolph Building
401 Dulany Street

Art Unit: 2644

Alexandria, VA 22314

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lao,Lun-See whose telephone number is (571) 272-7501. The examiner can normally be reached on Monday-Friday from 8:00 to 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chin Vivian, can be reached on (571) 272-7848.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 whose telephone number is (571) 272-2600.

Lao,Lun-See
Patent Examiner
US Patent and Trademark Office
Knox
571-272-7501 L.S.
date 10-19-2005


VIVIAN CHIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600